

From qrp-l@lehigh.edu Thu Jan 4 21:15:51 1996  
From: "BRIAN L. LEWIS" <76500.1621@compuserve.com>  
Subject: [2281] 75 ohm CATV Cable  
Message-ID: <960105012635\_76500.1621\_HHE27-1@CompuServe.COM>

As a newbie to QRP and QRP-L, I have found the QRP-L listserver a real treat. Lots of great people and information.

I have a question about feedline... and I have lots of it!

I have a 250' run from my shack to the top of my 65' foot tower. I have 3 runs of coax to my tower. 1 run of RG 213/U, 1 run of CQ-Flexi (9913 equiv) and a 3rd run of 7/8" 75 ohm CATV hardline. The CATV hardline is not currently in use. The CATV line has 440 mhz 75/50 ohm transformers on each end. I am considering replacing the 440 MHZ 75/50 ohm transformers with HF 75/50 ohm transformers (1991 ARRL Handbook).

Does anyone have experience with CATV line with HF (QRP)? Is it worth the hassle? Will I gain anything by doing this? I have 1400 more feet of this CATV line laying in my backyard. (I bet I could use it to make some neat antennas!)

BTW, there is a splice or two in the RG 213/U and the CQ-FLEXI. One for a remote antenna switch and one for where that crazy squirrel chewed through the coax. The CATV line is one continuous piece.

Thanks.

Brian L. Lewis

N50CD QRP-L #324  
76500.1621@compuserve.com

From qrp-l@lehigh.edu Thu Jan 4 21:15:51 1996  
From: burdick@interval.com (Wayne Burdick)  
Subject: [2279] ABX (adj. bandwidth xtal filter) in Sierra, Explorer II  
Message-ID: <v02130503ad121cb3bcb7@[199.170.106.28]>

Folks, Dick at OHR was kind enough to send me an Explorer II schematic. Turns out that his implementation of adjustable-bandwidth crystal filtering is nearly identical to the one I used on the Sierra in the first crystal filter--the same one I have been using for two years on various rigs and

have described in QRPP, etc. The only important difference is that the Sierra also has a second crystal filter following the MC1350 I.F. amp, with another varactor there that tracks the others. This second filter removes the MC1350's wideband noise.

So in answer to a previously-posted question, neither rig is using the actual Jones filter circuitry as used by Ten-Tec, although both Dick and I credit Ten-Tec for their circuit and have gotten approval from them. (In fact I didn't know about the Jones circuit until someone pointed out the similarities to me at Dayton last year.)

I'm sure that Dick would agree with me that, at least for CW-only transceiver kits, the extra PCB space needed for the more complex version isn't worth the improvement in bandpass shape. However, individual builders should be able to modify the rigs to use the full Jones filter if desired.

Wayne  
N6KR

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: burdick@interval.com (Wayne Burdick)  
Subject: [2280] All Sierras ordered have shipped...  
Message-ID: <v02130505ad12289d89a0@[199.170.106.28]>

..as of Jan 2. Have fun!

Oh, by the way, Bob Dyer is still waiting to hear from one gentleman from Japan who paid cash and arranged for will-call: Yasuyuki Yashizawa, JA1DZJ. If you know how to contact him or his company in the States, please give Bob a call at 415-494-3806.

73,  
Wayne

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: lbbarley@southwind.net (Bruce Barley)  
Subject: [2226] Amplifier Kit - Last Chance  
Message-ID: <199601040908.DAA13966@onyx.southwind.net>

Hi, gang.

Got the latest flier from Radio Shack in the mail today (01/03), and found the 1-watt amplifier kit is being closed out on a where is, as is basis. The price of the little bugger is now \$4.95/per. I called the R/S outlet where I usually shop, and they were out, but the clerk had access to the other local store's inventory on his computer and was able to tell me which stores still had some. If your local store is out, maybe they can find some on their computer close by for you. Stock # 28-4031.

The whole circuit board is about 1 x 1-1/2 inches, and is just right to fit into some of these qrp rigs which only run headphones. Power requirements are wide open, as the amp will run on from 18 volts down to 4 volts. Lots of possibilities here, as the bandwidth is from (so they say...) 50 HZ to 150 HZ at 3 db down. Hmmm. Sferics, whistlers, etc?

No, I'm not with R/S, but I just wanted to pass it on that these amp kits are going away forever, and at \$4.95 for everything... I got two of 'em.

Best 72's & 73's

Bruce - KB0PZD  
qrp-l #69  
lbbarley@southwind.net

From qrp-l@lehigh.edu Thu Jan 4 21:15:51 1996  
From: PAT DOYLE <DOYLEPS@LAKEHURST.NAVY.MIL>  
Subject: [2229] Amplifier Kit - Last Chance -Reply  
Message-ID: <s0eb92d6.084@LAKEHURST.NAVY.MIL>

Ten-Tec Kits also sell a audio amp kit that make a nice addition to headphone-only rigs.

From qrp-l@lehigh.edu Thu Jan 4 21:15:51 1996  
From: Jeff Gold <JMG@tntech.edu>  
Subject: [2277] Cascade Transmit help  
Message-ID: <01HZMCD12ZQQ9FRRZ5@tntech.edu>

HELP!!!, please

I have every part on my board except the final transistor. Both bands seem to receive well with natural sounding decent volume

audio.

I checked all the DC voltages. The mike jack(J1 pin 2) is 1.79 not 2.00 volts (but may have not cranked the supply up enough). Q15 has the S&D at .419 not .92 (someone who had their's working said theirs was the same.. so not sure on that).

I checked the Transmit chain with my scope.. and yes I admit.. I am not very skilled at using it.. but I did try.

I measured 50mv at Q12 source and then the mic amplifier output at U3 pin 8 seemed to be a little less than 50mv not the 400mv. I would tend to suspect U3.. but is this possible if all the DC voltages are ok? What else should I look for.

other weird thing.. i first tried an older icom (from a 02AT) mike and when I do the PTT the TX voltages are all low, and if I set the volume up too high.. I get feedback into the mike .. I still have the jumper wire on for the RF.. don't remember the directions telling me to cut it. When I use my MFJ mike voltages seem right.

at one point in the weeks I have been trying to get this to work I did have the 75 mtr band putting out a small power (little less than watt) and was able to peak the caps.. now they don't seem to make any difference if I put the scope on R99. Think you are suppose to be able to see a signal on R46..

any help would sure be appreciate.. I am very hopeful to talk to someone on this little dude.

PS anyone change out the final and get more power.

73,72

Jeff, AC4HF

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: herr@ridgecrest.ca.us (Michael Herr)  
Subject: [2221] CW and the Cascade  
Message-ID: <v01530502ad11fa8bee08@[199.120.150.78]>

Hi gang,

I intend to put CW into the Cascade. Reason? I enjoy backpacking and a CW AND ssb rig would be a blast! Could take the trusty NorCal 40 as I do now but that's more weight plus with the Cascade I get two bands. I intend to use a KC-1 to do freq readout, TR switching, sidetone and the like. I will probably just inject a IF signal at the mixer instead of the balance

modulator signal but will have to see. The wide IF is no problem cuz I live with that all the time with the Argonaut, but may add an audio filter as well.

But first I have to finish it! Man, am I having fun! Then I will move it to 40 / 17 meters as those are my main portable interests.

73 all

Mike WA6ARA

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996

From: NYOUNG@nova.wright.edu

Subject: [2270] Dr. Seuss, cosas numero dos y cuatro & the rhet of interp

Message-ID: <01HZMCSM98LU94EBFA@nova.wright.edu>

Ah, c'mon, gimme a break. I only had one line for the subject and didn't have enough room for "the rhetoric of interpretation." As in: how easily the stuff that we write gets misinterpreted as something else. Which brings up things, and we all know about Dr. Seuss and "Thing number One and Thing number Two" in \_Cat in the Hat\_. So, without further ado, here's the deal.

I responded to the questions about arrivals of QRPP and SPRAT to one of the list subbers with a note to read George Dobbs' editorial at the beginning of the most recent edition of SPRAT. Now, I know that what I said to that person was inflammatory and probably a whole lot more cogent than the sentence above, but Rev Dobbs does have a point. "Floggin willing horses is rarely a useful pursuit." And I think it's necessary to remember that these little moments of waiting for the stuff to arrive will pass. We are not -- as far as I can see from my historical perch looking back on the 60s -- junkies. We don't need the stuff right now. That's "right now" in big letters, underlined and boldface, in red, with a border and a herring. RIGHT NOW!!!! OR I'M GONNA DO SOMETHING WEIRD, MAN!!!! (hands with white knuckles nearly tearing the shirt from the listener's neck, the speaker's rage measured not in decibels but in the mist of saliva that sprays into the listener's face, which stares with all the horror of Gregor Samsa's father looking upon his metamorphosed son.) I hope we ain't that bad off. Not yet.

And still, it's true: we do pay subs and we do pay dues and we do expect to see something for it on a fairly regular basis. The quarterly journal should show up in the mailbox in a timely and regular manner. That only makes sense. But we also live in a world of humans, not robots. People do have to stop now and then to wipe a nose or dose a child or get a car fixed. A million aggravations, as my father used

to call life. Which makes it all the more necessary that we remember that flogging willing horses is rarely a useful pursuit. Or, for those with faith, we all fall short of the glory of anyone's vision of the divine. Nobody's perfect. And if the mag is late -- as in really late, as in "other people have been talking about this for a month now and I still ain't seed one word on paper" -- \_then\_ we can ask.

So that's Cosa Numero Uno. Cosa Numero Dos is a lot less preachy and certainly more QRP oriented: Voltage Probe Antoonas.

There was an article on the VPA many years ago in Ham Radio magazine. The deal was a small chonk (that's how they say it around here: /chonk/) of wire poked up into the air with a little box underneath, into which box was stuffed a FET amp of some sort. I'm looking for this info 'cause I'm an idiot who gave away his entire HR collection about 11 years ago. I'm looking for this info 'cause I'm an idiot who wants to try some VLF stuff and ain't got the sense not to. And... I just wanna have more excuses to burn my thumbs.

And Cosa Numero Tres? (he said, beady eyes squinting out from under his dusty sombrero, his fingers running across the front of his shirt, tracing again and again the path of many such excursions of sweaty, grease-fingered hands over the past months, if not years)

Well, just this: Anyone got any info on loop antoonas? No, not the big loops of wire strung around the yard to get on 80/75 with the other temper tantrums. I mean the loop antoonas that work for MW and LF (and maybe even 160m), the kind of deal that sat on top of Grandpa's ol' Atwater Kent. I'm thinking of building one (again) but I'm not sure if there's a diameter/size/gain/bandwidth ratio that I have to stick to. Like the grease from a poorly-made taco (from one of those Latino food joints in Eatons [in Toronto, Canada, fer cryin' out loud] what's run by a family of Koreans and two Hungarian women who help out on Saturdays) sticks to your fingers.

Oh, sure... I forgot. Brevity. Conciseness. Sorry. C^on~ mes^ili yaq.

73  
Nils  
WB8IJN

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: km@PACT.ORG.PE (Kris Merschrod)  
Subject: [2284] Explorer II is now in Peru  
Message-ID: <m0tY1Bq-0000GNC@rcp.net.pe>

Yes,

It has arrived safe and sound and first reading through and look over proves to be a very neat job. It looks like a fun.

Thanks to Bob for the description on tuning using a receiver -- I was going to use the MFJ Freq. counter from the analyzer -- I'll take my chances on the Ten-Tec Delta II and its FREQ stability first.

CU on 30 meters,

Kris,  
OA4DB0

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: "rohre" <rohre@arlut.utexas.edu>  
Subject: [2247] for Frank Ng0N  
Message-ID: <n1391369767.63260@msmailgw1.arlut.utexas.edu>

Pardon bandwidth---his server is unknown now to email.  
Frank, if you have a new email adr. since your Dec. post to QRP-L, please send privately. I have info for you.

73 all,  
Stuart K5KVH  
rohre@arlut.utexas.edu

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: wayneb@on-ramp.ior.com (wayne barnhart)  
Subject: [2224] forwarded msg  
Message-ID: <m0tXiWM-000RuHC@on-ramp.ior.com>

I don't know if he posted this over here yet or not. I got it from the Homebrew list. I'm sure that there are some folks on here that might be able to help as well.

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From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: Art Moe <artmoe@agora.rdrop.com>  
Subject: [2220] Four days in May  
Message-ID: <Pine.BSF.3.91.960103204318.7420B-100000@agora.rdrop.com>

Could someone repost the messages about the Four days in May.

Think I am going to Dayton

...-.-

73's

Arthur Moe

A.R.S. KB7WW

artmoe@agora.rdrop.com

Oregon City, Or

45-19-22 N 122-36-37 W CN85

At the end of the Oregon Trail

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996

From: "evans ken" <evans.ken@wgs-2.bwi.bls.com>

Subject: [2243] FW: Sprat Renewal

Message-ID: <n1391367272.10284@wgs-2.bwi.bls.com>

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From: evans ken on Thu, Jan 4, 1996 10:56 AM

Subject: Sprat Renewal

Please forgive the use of bandwidth, but I need help with my SPRAT subscription. The last issue I received was the Spring, 1995. I renewed in Jnauary 1995, via a U S ham in Texas. I cannot find the name/call of the individual handling subs here in th U S. Can someone pass this on so that I can continue to receive this excellent magazine?

Thanks and 72,

Ken KJ4XR

evans.ken@bwi.bls.com

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996

From: Erik Werner <werner@mail2.netropolis.net>

Subject: [2219] Helical antenna.

Message-ID: <199601032234.QAA05438@mail2.netropolis.net>

I just moved here, and I'd like to start setting up some sort of ham shack in my apartment. Here's my question.

1) Is there anyone with specs on a helical dipole antenna that I can wrap around say a broom stick and place on the window sill? I plan to use the 40 and 80m bands, and since I don't have the room nor desire to have wire running all over the apartment, I plan on using at a later time an antenna tuner (when \$\$\$ permits.) This is why I'm abandoning the carpetloop I had up in Buffalo. Any suggestions?



I do on looking into the gutteers below my window however, but stealth is of the utmost importance. :)

Erik

-----  
Erik Werner  
Technical Analyst  
PARANET  
1776 Yorktown  
Houston, TX 77056  
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From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: jfurman@stratacom.com (Jeff Furman)  
Subject: [2272] How I added RIT to the PIXIE 2  
Message-ID: <9601042259.AA01220@Strata.COM>

I added RIT to the PIXIE by first looking for a line that reliably changes voltage between two states from key up to key down. This looks like the emitter of the final. I replaced the original 10K resistor by a 10K pot with one end to ground and the other end of the resistor to the emitter. Now the wiper of the pot has a voltage that I can set to adjust the RIT width. This is the rest of the circuit: I lifted the ground end of the crystal and put in a series L-C

network with the capacitor varied by the RIT voltage. The capacitor (I used 82 pf) goes to ground, and the inductor (I used an 18 uH molded choke) goes to the crystal end originally grounded. I added the necessary varicap (MMotorola type MVAM 109) across the capacitor WITH THE ANODE GROUNDED (varicaps operate reverse biased.) The last part is a large value resistor connecting the varicap to the pot wiper. I used 150K here. A 40 meter crystal is pulled DOWN about 10 khz, with a few khz RIT adjustment range.

I also used a two transistor audio amp in place of the LM386, but that's another story. Good luck, Jeff KD6MNP Jfurman@strata.com

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: "Donald Roland" <dmroland@fox.nstn.ca>  
Subject: [2253] HW-7 for sale.  
Message-ID: <65439.dmroland@fox.nstn.ca>

For Sale: Heathkit HW-7 QRP Radio

This radio is in excellant codition and complete with manual and is in its original Heathkit configuration i.e it has never

been modified.

"The Low-Power CW Transceiver, Heathkit Model HW-7, covers the CW portions of the 40, 20, and 15 meter bands. The operating frequency is VFO (variable frequency oscillator) controlled on both transmit and receive, with provision for crystal transmit. Twelve transistors and one integrated circuit comprise the all solid-state circuitry." From the Heathkit manual. The HW-7 is susceptible to microphonics due to the nature of its receiver circuitry.

Price \$100US or best offer (subject to acceptance)

73 Don -VE1AOE-

--

Donald Roland  
dmroland@fox.nstn.ca

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: Paul Harden <pharden@aoc.nrao.edu>  
Subject: [2255] HW-7s, 8s, 9s ...  
Message-ID: <199601041908.MAA21568@zia.aoc.nrao.edu>

I have never owned a Heathkit QRP rig. And I see this traffic all the time on the HW-7s, the 8's and 9's. Would some kind soul be so kind to explain to those of us as ignornat as I as to the basic differences between the various HW-series QRP rigs? You never know when one might surface locally too cheap to turn down! Just curious. Well actually more than curious, I want to know =:-o

Paul NA5N

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: PDouglas12@aol.com  
Subject: [2259] Is Siesta Key an IOTA?  
Message-ID: <960104150112\_106491109@mail02.mail.aol.com>

Hi gang,

I mentioned to Chuck that I am taking a weekend with my wife on Siesta Key (near Sarasota) in a couple weeks (Jan 12-14). He said this may be an island in the IOTA numbering system, and it may be sought after. Anybody know? If I get permission from my wife, I could fit the Sierra into a carry-on.

Anybody know how to find IOTA numbers?  
72,  
Preston WJ2V

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: CURTIVB@aol.com  
Subject: [2222] KA3YJG  
Message-ID: <960103235230\_31296894@emout06.mail.aol.com>

Hello Bob and everyone else,

Bob since I'm having no luck at all reaching you thru your e-mail, thought why not here! Have received all you sent, just can't reply. I started on my OHR400, this will be my fourth OHR kit and obviously it seems very familiar, [It should by now]. Anyway Bob tnx for the info on this great group, there sure is a pool of expertise here!!

Curt KA3IVB

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: cooper@gmpvt.com (Tom Cooper)  
Subject: [2235] KC-1 keyer with OHR Explorer I  
Message-ID: <199601041451.JAA02221@web.gmpvt.com>

The Wilderness Radio KC-1 keyer/freq readout/controller works fine in my Oak Hills Research QRP Explorer I. I installed it "upside down" at the top of the front panel, so that the speed pot is near the RIT knob. Cv is 40 pf, Ca is .047 and Ra is 100 ohms. Since my Ex I is somewhat modified, these may not be right for you.

The only operating problem I have with the KC-1 is pushing both switches simultaneously to get into command mode. Maybe if I practice enough I'll get to Carnegie Hall. The little gadget works great otherwise. Maybe OHR or Wilderness will offer a combo rig someday, complete with all the holes.

Using the KC-1 showed me why I haven't heard much on 14.060. I was listening on 14.052!

73,

Tom WA1GUV  
cooper@gmpvt.com

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: burdick@interval.com (Wayne Burdick)  
Subject: [2278] KC1 max VFO freq., etc.  
Message-ID: <v02130501ad121511f1a1@[199.170.106.28]>

#### KC1 Max VFO Frequency

The KC1 works at 30MHz if you use a large enough signal. (I don't know how much higher than this it will go because my signal generator tops out at 30MHz.) I think Rob Capon is using his at up to 23MHz on the OHR 4-bander. Bottom line is, it will work with just about any VFO, although in rare cases you may need to change one resistor to increase frequency response of the on-board VFO amp. (If you have a 0V/5V square wave, you can also bypass the input amp altogether and just feed the signal into the counter input pin on the PIC.

#### Calibration

No matter what frequency VFO you use, check the operating frequency with a separate frequency counter so you can calibrate the KC1 to compensate for all of the mixing processes, KC1 4MHz crystal inaccuracy, etc. Since the KC1 lets you program an offset, you can easily tweak the offset to make the KC1 accurate to within 1kHz. Even without calibration, chances are you'll be very close.

#### Other rigs not listed in the KC1 manual

If you build the KC1 into something other than the rigs listed in the manual, please send me a complete description of how you did it. Someone put a KC1 into the Explorer I -- please send me that one. I'll credit the author/builder for each rig that I put into the manual.

Thanks,  
Wayne  
N6KR

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996

From: wayneb@on-ramp.ior.com (wayne barnhart)  
Subject: [2225] keyers  
Message-ID: <m0tXiW0-000RuYC@on-ramp.ior.com>

Well, be winding down to the final two quarters at EWU here in Washington state. Actually it be my second degree as there not be a hugh demand for Zoologists at the present time.

All the fun electronics is over and I am left with 2 qtrs of the dreded microprocessors, specifically the 68HC11.

I thought that as long as I gots to do it I might as well go into it with the idea of making a project out of the thing. Some might see the 6811 as overkill for a keyer but remember, this is a "learning" experience.

I'm thinking maybe 8 banks of memory perhaps ? each.  
I blv the chip has an onboard A/D so maybe a decoder as well?

I donno. My only experience with keyers is this ugly green 10lb brick from heathkit holding down my bench.

Lets consider this a portable machine AC/DC and I think I want to reinvent the wheel here so no references to completed published projects please.

So, if you could have anything you wanted in a keyer, what would it be?

Thanks

Wayne Barnhart WB7WHI  
Spokane, Wa.

Dirt is good!

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: Larry East <LVE1@inel.gov>  
Subject: [2245] Latest QRPP and SPRAT  
Message-ID: <9601041638.AA25022@garnet.inel.gov>

Are the December issues of QRPP and SPRAT "on the street" yet? Haven't received either here in the "Idaho Outback" (yes, my dues are up-to-date...).

72, Larry.

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: adams@chuck.dallas.sgi.com (chuck adams)  
Subject: [2292] MFJ-249 Multipurpose SWR Analyzer  
Message-ID: <199601050308.DAA11751@chuck.dallas.sgi.com>

Reason #364 why I love this little critter.

I get out the NC40a to check on it with the NE40, Explorer I, Explorer II, SWL 40, NN1G Mark II, Sierra, and a few other rigs. This is going to take some time. Another reason why Wayne and others haven't seen a detailed chart other than the CQC one. It's a lot of work.

Anyway I'm tuning from one end of the band to the other. I'm putting these little map dots (remember when W03B and I were in a heated contest on 30M this past summer? I used these puppies to mark each new contact until I got too many....) So I'm putting these on the front every 5 KHz. In the process I run across one heck of a strong heterodyne BC at 7.048MHz. I'm staring at the desk deep in thought thinking of different ways to track down the offending station and I'm looking at the MFJ-249. I never go anywhere without it. :- ) Hey, it'll transmit anywhere. Power it up and start at 1.8MHz.

Slowly tune upward with finger on S0-239 so that I'm a general purpose all band antenna (brings new meaning to the term 'dummy' load) radiating with so much efficiency that when I hit 5.745MHz the NC40a jumps about 3 cm off the desk. Didn't do my eardrums much good either!!

So I get WHRI somewhere up in the midwest very very strong.  $7.048 - 5.745 = 1.303\text{MHz}$ . Strange combo. Playing with placement on the desk etc. doesn't make any difference or tuner adjustments.

The point: when looking for incoming signals use the SWR Analyzers to generate any freq between 1.8 and 170MHz for the MFJ-249.

I'm listening to this station and I think I'm gonna send in my \$25 for the lifetime warranted super small and super good shortwave listening antenna made in the USA and guaranteed to help me receive shortwave signals anywhere in the world. Such a deal. I have the mailing address in case we need to go in on a group

buy. :-) I really don't see how we can all go without getting one of these puppies!! :-)

FYI dit dit

--

Chuck Adams (K5FO CP-60) adams@sgi.com  
Box 181150, Dallas, TX 75218-8150

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: adams@chuck.dallas.sgi.com (chuck adams)  
Subject: [2267] Missing Page  
Message-ID: <199601042130.VAA11074@chuck.dallas.sgi.com>

Gang,

I wish to apologize publiclly for my short posting on the column page missing in Jan 96 issue of QQ. Some people interpreted as my being ticked off. Didn't mean to give that idea. It is difficult to put things in print and not have feelings and moods misinterpreted. I consider my self laid back. In fact too laid back as I don't panic. We've all seen people go ballastic over the littlest things and I feel like you gotta just take things one at a time. I'm working on some other issues and it takes me time to get things done and I sometimes wish I had more time in a day, but it's probably good that I don't. Patience is the key here. I just wanted to comment that a page was missing and it just happened to be mine. Luck of the draw. Also see my new call. Lynn won't be happy. :-)

The Quarterly Jan 96 issue is great. I thought it humorous that the correct reference is "The Quarterly" and not QQ, so from now on this author will follow the rules. :-)  
Everybody is doing a good job on the new and improved format. Ron Stark, KU7Y, is doing great and he has so much information gathered up to give out and in limited space. I really love the new format and the new contributors too numerous to list here. We'll probably make some comments on some later in about two weeks when the USPS gets 'em delivered. Notice how this group counts down things? :-) :-) :-) We're all statisticians. A bunch on this group has contributed a lot and we hope that you all will help to keep the information flowing. With over 800 people subscribing I realize what a load that the super-information-highway would have if everyone was prolific. :-)



The same holds true for the QRP newsletters. I think with the tremendous growth of QRPers in the last few years (or maybe it is the information flow is getting good enough that we are finding about each other). In fact I created a monster. With this group we love having the immediate access to so much brain power and information and experience that we tend to forget that there are a large number of people in this world that are not as fortunate as we. We get into the habit of having this stuff right here and right now. It takes the rest of the world months to get the same stuff that we've already seen (sometimes more that we want but we gotta work with economic, political, and social issues).

We did the stat showing who belonged to what group, but more than half of this group doesn't belong to anybody but maybe the ARRL. :-). And that's at \$31+ per year. Small change in the big budgetary aspect of daily living.

I was waiting until the Jan issue came out before posting this. Now I realize that the USPS is taking its time after the holiday season getting the second and lower class mail to us. This is just a part of the article that will appear in the next issue of QQ. So subscribe as this may be the last you will see posted to this group. :-). I can't give you preferred access. :-). The database is not public information other than what gets into print and I'm making every attempt to get it all in print in The Quarterly.

This also answers the question around Christmas time about what the miles/watt "records" are. This will start the traffic flowing on this group, I'm sure. And it surely gets guys/girls off the couch and trying to better them.

--so when you get the Quarterly this is relative to the table at the end--  
[Remember this is written for The Quarterly Jan 96]

I get the question and others have discussed just who is doing the work for QRP operation. Most will agree without the receiving station and good ears the contact would not have taken place. The KWM award (as it is usually abbreviated) can be obtained by the receiver by showing proof of contact and the power level of the other station. There have been many awards done this way and also some QRPers will send in the money with photocopy of received QSL and have the award issued to the other station as a courtesy and an individual award for a job well done. The CALL, AWARDED TO, and CERTIFICATE TO lines on the awards application in October

1995 issue of QQ should reflect this information. The power level is the lowest of the two stations in QSO to compute the miles per watt value.

<snip snip>

Here is a table of the greatest distance per power for the 160M through 2M bands. These are "records" that are in the database. They are not official world records for I know that on 10M there is a 2 Billion Miles per Watt value for a Fireball record. With this posting I know that I will get a lot of attempts to beat these records and we will probably have to put into place a method for validation which makes it very very difficult for me and the people involved. In this day and age everyone wants to be sure that there is a clean record and valid and accurate data obtained.

BAND	MILES/WATT	CALL
1.8 MHz	13,300	GW4AEC
3.5 MHz	851,339	AA2U
7.0 MHz	1,909,502	AA4XX
10.1 MHz	20,727	NW00
14.0 MHz	87,800,000	OK1DKW
18.0 MHz	59,380	K4TWJ
21.0 MHz	19,250,000	WB6UNH
24.0 MHz	2,445	JL1FXW
28.0 MHz	218,333,333	K7IRK
50.0 MHz	134,200,000	J01XWH
144 MHz	87,800,000	OK1DKW

[This next paragraph is related to the table that appears in Jan 96]

The listings of the KWM on the following pages have several columns of data and I have removed some that are in the data base to allow a format that will fit with the font size used. The columns have the certificate number, date in format of year month date, call that the certificate is going to, that stations power level (and if not known QRO shown) and other station and power level, the resulting miles/watt so given the lowest power you can calculate the actual great circle bearing distance, band in MHz, mode, and date of qso also in year month day.

The reason for the date in this format was for space and for computer sorting to gather statistics on monthly averages over the years vs. band and solar sunspot data. Something that no one has ever done before. It another reason why this database is so valuable now and will continue to be.

..

-----end of part relative to miles/watt-----

I didn't list above 2M. One thing that that Zack Lau mentioned is that you can get very small power levels, and we mean very small power levels and very small distances and get very impressive numbers. These guys measure power levels down to fractions of a microWatt! When scientists can detect single photons in the visible region we are talking QRP(p)\*\*n where n is large. :-) So I don't list those. The VHFers in QST keep those kind of things.

We still have issues floating on just how many people can measure their power levels to within 2% or less. Just what error analysis and standards can we as individuals do? A few of us have invested a considerable amount of money into freq counters and high freq scopes. Fewer have high dollar spectrum analyzer and others have access to them at work or through friends, etc. I have three digital multimeters and they vary by as much as 1% on measurements of the same DC voltage at the same instant in time. Tolerances in the manufacture of components (witness the toroid discussion ongoing on this group) used within equipment requires manufacturers to set at the factory certain parameters in order to insure some accuracy. For the typical ham who doesn't have the budget for laboratory caliber equipment like AA4XX and others it is difficult to guarantee or get reliable measurements. What I'm saying is there a way for 800 hams to accurately measure to within 2% or less any power level from 1mW to 5W? From 1MHz to 30MHz?

The anal retentive will want to know how to get the distance down to an error less than 100 meters. That is not the issue. Do the calculations, get rid of the headache after you do this, and then call me in the morning. :-)

I hope this answers all the questions. dit dit de K5FO

--

Chuck Adams (K5FO CP-60) adams@sgi.com  
Box 181150, Dallas, TX 75218-8150

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: John Mckee <jmckee@rfmd.com>  
Subject: [2231] newcomer  
Message-ID: <199601041407.JAA77971@nss2.CC.Lehigh.EDU>

Hello cyberhams and fellow QRPers,

My name is John McKee WB40FT and I am a relative newcomer to QRP operating even though I have been a ham about 26 years. My first venture into QRP has been with an NN1G SW-30 kit. This has been the most fun I've had in over 20 years. With well over 100 QSOs I am hooked! I have been able to work stations from Canada to South America. My first QSO was with a VE3.

A lot of my QSOs have been QRP to QRP.

One area that I would like to explore is milliwatting. I would be very interested to hear what others have been able to do with QRP and what types of rigs you are using. I also would like to homebrew more of my stuff.

One topic that seems to come up a lot in regard to the NN1G and similar rigs is the audio level. I have tried several kinds of headphones with mostly mediocre results. However I think I found a good solution. I am using a pair of Sony ultra lightweight headphones. I can't recall the model number but these are the kind that fit right into your ears. They put the sound where it does the most good. The sensitivity is excellent. I was not sure about how comfortable they would be but I have worn these phones for several hours at a time with no discomfort. The "hearing" quality now rivals many commercial rigs.

I look forward to many QRP QSOs and exchanging ideas and info via email.

73/72

John McKee  
WB40FT  
QRP-ARCI#8794, NEQRP#407  
jmckee@rfmd.com

or

122 Westridge Road  
Advance, NC 27006

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: bmitchel@kodak.com (Brad Mitchell)  
Subject: [2233] One more thing I want in a kit..

Message-ID: <9601041426.AA11398@iiatasun.cba.Kodak.COM>

Oh yeah, built in Speaker, I forgot that one..

During field day, I never use headphones..  
We operate one station, 2 ops, QRP, battery..  
We drive the wildlife crazy!

73 Brad WB8YGG

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: RHILT0@acxiom.com  
Subject: [2237] Polarity Protection  
Message-ID: <0ebedaf0@acxiom.com>

The January 96 issue of QRP Quarterly has an article titled "More On Reverse Polarity Protection" (pages 36 & 37). It makes perfect sense (to me) except for one minor detail: in Figure 2C, what is the purpose of the diode in parallel with the relay coil? My guess: when the rig is powered off, the diode shunts to ground the voltage spike generated by the collapsing field of the coil. But wouldn't that be handled by the power supply components? And just how big could that spike be that it would damage the radio but would safely pass through the diode? (I guess you pick a large enough diode that this isn't an issue...).

Just demonstrating my ignorance of basic circuitry...

7.3 ki5ez  
Bob

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: "John Foote" <John\_Foote\_at\_HDN-BCSE@ccgate.ml.nec.com>  
Subject: [2242] Possible users club/group for Alinco owners  
Message-ID: <9600048207.AA820782903@mvlsmtt.ccgate.ml.nec.com>

Is anyone in the QRP-L interested in a semi-formal organization of Alinco DX-70T owners?

Such a group might be able to do some of the following:

- 1) Exchange practical info from field experience

2) Approach Alinco with general questions and requests for possible mods

3) Gather opinions for neat improvements and then approach companies like International Radio in Florida about add-on or add-in improvements. (IR came up with a TS-50 circuit that provided true RF speech processing and a better narrow cw filter, both of which fit nicely INSIDE the radio.)

4) Encourage and keep a list of third party accessories available for the DX-70T and where they can be obtained.

It occurs to me that, at its price/performance point the DX-70T will probably attract a following. Who knows? It might even have its own Home Page someday.

72 de KR4GL  
John Foote

From qrp-l@lehigh.edu Thu Jan 4 21:15:51 1996  
From: Goran Hosinsky <hosinsky@royac.iac.es>  
Subject: [2260] QQ and SPRAT arried off the coast of Africa  
Message-ID: <9601042012.AA00770@royac8.royac.iac.es>

What did you do - bribe the local postmasters? Both QQ and SPRAT arrived today here in a small village on the back side of one of the secondary Canary Islands where normaly the post from our main administrative center on the next island takes a week or two.

How did you do it??

Thanks es 73

Goran ea8yu

From qrp-l@lehigh.edu Thu Jan 4 21:15:51 1996  
From: QLF%mimi@magic.itg.ti.com  
Subject: [2230] QRP-L  
Message-ID: <9601041355.AA26341@itg.ti.com>

From: Brad Bradfield     QLF

Subj: QRP-L

Per Chuck's message last night about straight keys; I taught Novice classes for several years and always recommended to my new Novices to not even think about messing with a keyer or (horors!!) a bug until they could do 15 wpm or so all night long with no problem. I have found that this gives one a much better feel for the code. A green operator (who doesn't yet have a feel for what good code even sounds like) with a keyer or bug is bad news.

73's

Brad Bradfield, WBOCGH  
Corinth, TX

From qrp-l@lehigh.edu Thu Jan 4 21:15:51 1996  
From: Jacqueline Herman <jherman@sierra.net>  
Subject: [2282] QRPing an HR2510  
Message-ID: <Pine.SUN.3.91.960104172747.23928E-100000@diamond>

Hi Gang,  
I've just acquired a Uniden HR2510 (25W, 10M) with no schematic. I'd like to reduce the power output to 5W (unlike the Radio Shack version, there is no low-power switch).

If anyone has any tips in doing this please email me (I've had to unsub from the list).

Included in the manual were instructions for modifying the rig for 26-28 MHz. I find this quite nauseating and am wondering if Uniden or the dealer included this page. Shame on one of them. (I bought the rig second hand from an OT ham so I know he didn't insert these mod instruction.)

Jeff NH6IL\7

P.S. I've been using an old Heath DX-60B xmtr throttled back to just 5W output (its 6146 final tube is capable of 90W input) and have been having a ball! So don't pass up an older tube rig if you see one for sale - you can still use it without feeling any guilt.

The DX-60B + HG-10 VFO and my RS shortwave receiver (DX-400) have given me lots of QRP enjoyment. Note the antenna is just a long wire + tuner.

From qrp-l@lehigh.edu Thu Jan 4 21:15:51 1996  
From: "rohre" <rohre@arlut.utexas.edu>  
Subject: [2248] QRPp, Sprat and ARCI Quarterly here  
Message-ID: <n1391369310.88658@msmailgw1.arlut.utexas.edu>

my cup runneth over; all these magazines came within a couple days of each other.

To Texas, central part, so that may give a barometer to the rest of the country--yours soon!

This is a good time to remind ARCI members and Sprat and all the other subscribers, while the new year is fresh in your mind, look at your mailing label, or just renew, as Sprat is due for overseas members, and many QRP-ARCI members need to renew to be able to cast Directors ballots, (voting in the Jan. issue.), etc. Might as well write all those checks while you have the book out to all your qrp memberships.

72,  
Stuart K5KVH  
rohre@arlut.utexas.edu (Now if my backordered Comm. Quarterly replacement would just come!!)

From qrp-l@lehigh.edu Thu Jan 4 21:15:51 1996  
From: "David E. Shelton" <deshe101@homer.louisville.edu>  
Subject: [2252] QSK wanted so what now?  
Message-ID: <Pine.OSF.3.91.960104125823.27204A-1000000@homer.louisville.edu>

Hello to All,

I just want to say thanks to everyone on the QRP-L list for all the responses to the KITS??? message I left. Everyone did a wonderful job of shedding light on what kits are within my capabilities now and what construction skills and equipment are necessary. Thanks to all!

I wanted to get some advice on another problem that I have. Although not really a problem. I currently run an Icom IC-728 xceiver and the matching AT-160 which I love dearly, its a great general purpose rig. However, since my pursuits are primarily CW, I have been striving for an extra feature, QSK. The IC-728 which works very well as a CW xceiver has only semi-QSK which is far short of the real McCoy. I have been thinking about a new rig, in fact the IC-728 is for sale, or possibly a modification to the rig to give it the QSK. One thing I have decided on is that I am definitely going to assemble a QRP rig that has the feature. This is



infact one of the primary criteria, the QSK quality and receiver sensitivity.

Any advice appreciated.

73/72,

de KE4FPS, David  
QRP-L #142

David E. Shelton, RN, BSN	Every Patient Deserves A Nurse!
deshel01@homer.louisville.edu	Help Professional Nurses Maintain the
102551,1470@compuserve.com	Highest Standards of Care in Every Health
KE4FPS@WD9AGK.#SIN.IN.USA.NA (packet)	Care Setting.

-----  
====The goal of the American Nurses Association. Patient Care always First.====  
-----

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: nskousen@scientechn.com (Niel Skousen)  
Subject: [2276] SK-III measured currents  
Message-ID: <v02130506ad120e5e89bc@[198.60.91.132]>

SK-III (included an LED load 8-12 ma)

Initial Current .2 ma  
Quiesenct current .092 ma

Dots @ 40 wpm 18 ma  
Dashes @ 40 wpm 26.6 ma

-- est. life w/ 9v batt  
 $8.6 \text{ wk} = (540 \text{ mah}) / ((6 \text{ hr/wk} * 40\% \text{ tx.duty.cycle} * 26.6 \text{ ma}) + (162 \text{ hr} * .09 \text{ ma}))$

-----  
Niel Skousen, nskousen@scientechn.com  
SCIENTECH Special Projects  
208-525-3742, 529-4721 (FAX) WA7SSA  
-----

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996

From: RICHQRP@aol.com  
Subject: [2288] SKN 40 mtr.  
Message-ID: <960104213938\_106839817@emout05.mail.aol.com>

Boy was the band bad..I worked for about hour on hour off..all through the night...4 contacts HI HI..The first though was a QRP-L member N6WG thanks bob..One from the QRP WSN KE6PTM ..the other was from up the coast and one from Canada...Still had a good time and with the qrn a good headache..HI HI 73's to all rich wd6fdd.

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: Mark E Gustoff <Mark\_E\_Gustoff@ccm.ch.intel.com>  
Subject: [2271] SL6270 IC

Fellow QRP'ers:

The Plessey part SL6270 is planned to go end of life as of June of this year (at least that's what a distributor for the part told me).

Many of you know this is one of the components in the Cascade transceiver and possibly other transceivers sold as kits out of England.

I found a replacement for the one which is suspect with my Cascade thanks to the suggested sources posted on the QRP-L previously (Thanks to those posters).

If others on the net want spares of this IC, it might be wise to locate them now and purchase them while you can. As they get rarer the price seems to go up. One company quoted me a price of \$100 for 5 chips.

I've not received word yet on whether there will be a replacement part from Plessey or others for this IC.

Mark

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: pelt@vt.edu (Randy Pelt)  
Subject: [2266] Sprat/Qrpp  
Message-ID: <199601042114.QAA01575@quackerjack.cc.vt.edu>

Received my Sprat last week and have not yet received my Qrpp. It's

amazing how a mag from Europe can get here weeks and sometimes months before Qrpp.

All you guys running for the BOD of NorCal should have as part of your platform the sending of Qrpp first class mail!! The price difference is pitly.

```
*****
*Ranson J. Pelt *
*Internal Audit Manager *
*Virginia Tech 0328 *
*Blacksburg, VA 24061 *
*(540) 231-9475 FAX (540) 231-4681 *
* *
*QST de nz4i Semper Fi *
*****
```

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: "Tim Stabler" <TSTABLER@iunhaw1.iun.indiana.edu>  
Subject: [2275] Sunday  
Message-ID: <33D53479A7@iunhaw1.iun.indiana.edu>

Sunday, January 7, is the annual hamfest in South Bend, IN. It is held at the Century Center downtown and, other than the art wing, the fest takes over the center. A couple dealers have told me this is the best hamfest they attend. If you are within driving distance of South Bend, give it a shot. You will NOT be disappointed.

By the way, Chuck Adams did FAX me the alignment for the WM-1 so will get at that tonight after registration is over here at the university.

Has anyone done the Sunlogic DY-1 keyer?? As I remember, this is a Mike Bryce unit. (Forgive me if I have the name wrong; I do not have a 73 magazine here in the office with me) I got the unit at the Ft. Wayne Hamfest in November along with the smart charger from A&A but time has not been kind to me so they still sit in the boxes.

72 de Tim WB9NLZ

Tim Stabler  
Department of Biology  
Indiana University Northwest  
Gary, IN 46408

(219)980-6718  
FAX: (219)980-7125

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: adams@chuck.dallas.sgi.com (chuck adams)  
Subject: [2250] The Quarterly  
Message-ID: <199601041729.RAA10233@chuck.dallas.sgi.com>

Membership and getting the Quarterly:

Mike Bryce, WB8VGE  
2225 Mayflower, NW  
Massillon, OH 44647

\$12 for new member (\$14 DX)  
\$10 for renewal (\$12 DX)

Check of MO payable to QRP-ARCI in US funds.

If closer for DXers,

Dick Pascoe, G0BPS  
Crete Road East  
Folkestone, Kent CT18 7EG  
England

Hope this helps.

--

Chuck Adams (K5FO CP-60) adams@sgi.com  
Box 181150, Dallas, TX 75218-8150

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: Jochem@t-online.de (Joe DK7VW)  
Subject: [2228] US Mailing Adr.  
Message-ID: <m0tXoKk-0000XEC@ermail00.btx.dtag.de>

Hi gang,

in February I will (hopefully) pass my US license exams here in DL. I want to try up to General, maybe more...(next VE session will be in april ;-))  
Since I've got no good uncle in the US, I'm looking for a friendly ham providing me a mailing address in the US according to FCC requirements. Of course I will pay for any costs (forwarding mail to DL, etc.).  
I'm 41 years old, working as regional sales manger in a pharma company. Married, three cats, no kids. Licensed in 1977 I'm active mostly in CW/qrp.  
If you consider it a nice idea to be my "mail manager" and maybe more give me a notice.

72 de Joe, DK7VW

Werner 'Joe' Jochem  
Postweg 20  
37671 Hoexter  
GERMANY

G-QRP-CLUB 7598  
PR: DK7VW@DB0NHM.#NDS.DEU.EU  
E-Mail: jochem@t-online.de  
Phone: +49 5271 8577  
Fax: +49 5271 8560

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: RobCap@aol.com  
Subject: [2246] Wanted: Unbuilt Heath HW8 or HW9  
Message-ID: <960104114715\_83695859@mail04.mail.aol.com>

Wanted: I am interested in purchasing a Heath HW-8 or HW-9 QRP transceiver, in its original unbuilt state. If you have one for sale, please contact me with details and pricing. My E-mail address is: RobCap@AOL.com

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: rwright@soml.com (Robert Wright)  
Subject: [2223] Weird CW & Icom 706  
Message-ID: <199601040521.VAA14415@sonic.net>

For what its worth: One position of the built-in electronic keyer in the Icom 706 allows use of the microphone up/down keys to send cw (dot/dn - dash/up) and surprisely, one can send fairly well up to 20 wpm or so this way without a key. Handy when condx marginal mobile and needed to use CW but no key? Is this a common feature these days or is this new to the mini-xcvr market?

72/73... Bob WB7CNJ in cool Santa Rosa, CA.  
Robert Wright  
rwright@soml.com

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996

From: bmitchel@kodak.com (Brad Mitchell)  
Subject: [2232] What I want in a qrp KIT  
Message-ID: <9601041421.AA11335@iiatasun.cba.Kodak.COM>

Ok all you aspiring kit creators..

If I were to buy a kit, here is what I personally would want:

Something cost effective, like the Sierra, in that you buy the bands you want.

Something that has a meter on it, so I don't have to have one on the external tuner.

Something that has 5watts out for those poor conditions.

Something that does not use a relay for 5w QSK!

Something that has selectivity of my argosy with the 250 Hz filter, and optional audio filter.

Something that uses minimally sbl-1 mixers, instead of the ne602.

Superhet design of course.

Audio output enough to drive other people crazy..(LM-386, just doesn't get it)

(P.S. I notice Dave Benson also realizes that the LM386 is a poo poo aproach).

I probably missed some, but these are the essentials.

Things, I personally do not care about:

Digital display: if I set it up right, and it doesn't drift, then I don't need it.

SSB , would be nice, but not necessary.

Ok, now the challenge is, for you to tell me that this already exists as the

x radio from x company. Now remember this is a kit, not homebrew :-)  
(sorry)..

If this were available , even I would consider building a kit. I think that this should sell for < \$300.00 or it wouldn't .

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: Jeff Gold <JMG@tntech.edu>  
Subject: [2251] what I would like to see in kit  
Message-ID: <01HZM1J5VLK09FRRZ5@tntech.edu>

I would like a kit.. and take this with all the items Brad listed:

puts out 10 watts SSB and has built in speech processing..  
basically a MFJ that doesn't drift, with a Norcal 40 CW ability and a  
KC-1 built in .. now think that should be doable for around \$250

73

Jeff, AC4HF

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: svein@eci1.ucsb.edu (Svein Vetti)  
Subject: [2274] Where to get 10.245 crystals ?  
Message-ID: <9601042310.AA14163@violet.ucsb.edu>

HI

I am currently trying to locate parts to Motorola's "all in one" chip receivers.  
They all need a 10.245 Mhz crystals (10.7 - 10.245 = 455 k) so why do all  
the sources I have checked up (digi-key, newark) sell 10.240 ones instead  
of 10.245 ???

Can someone give me a hint on where to get a 10.245 crystal

SVein, UCSB California

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: kub@upl.com (Steve Kubisch)  
Subject: [2238] Where to get air variable caps?  
Message-ID: <9601041518.AA27696@ringworld.pacificorp.com>

Hi,

Thinking of building the Z-match tuner from the July QQ and  
would like to find a couple of dual section 300 - 450 pF air  
variable caps. Any one know where these are available?  
Fair radio Sales might have them though I haven't checked  
yet.

Thanks and 72,

Steve -WW7Y-

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: scicior@cp.uswc.uswest.com (Steve Ciciora)  
Subject: [2263] Where to get Coax  
Message-ID: <9601042053.AA24466@sp5-316.nts.uswest.com>

Where do you guys get Coax? While not exactly QRP related, I will be needing a source of 50 ohm cable in the future. For now, I'm looking for RG-6/U (75 ohm version of RG-8, I think). The Home Automation Catalog I just got has it for about \$250/1000 ft. More than I need, and hopefully I can find it cheaper.

Thanks!

-Steven Ciciora  
KB0PJF

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: dgf@netcom.com (David Feldman)  
Subject: [2239] Re: Alinco DX-70T as QRP rig  
Message-ID: <199601041522.HAA01922@netcom23.netcom.com>

>From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>

>Caution:

>

>Like the IC-706, the rig draws 600-700 mA on receive and 1.6 A on xmit  
>with NO power out. Putting out even 5 watts draws between 3.5 and 4.2 A.  
>It's a dynamite QRP rig with a great receiver, but it DOES NOT conserve  
>battery capacity.

You are fortunate. My IC-706 consumes in the 3-4 amp range on QRP transmit (5 watts or so...), and well over an amp in RX.

73 Dave WB0GAZ dgf@netcom.com

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: NONE <wynnt@utkux.utcc.utk.edu>  
Subject: [2269] Re: CMOS III was Re: MFJ 9040  
Message-ID: <Pine.SOL.3.91.960104171734.19265A-100000@UTKUX1.UTK.EDU>



On Thu, 4 Jan 1996 11:38:32 EST PDouglas12@aol.com wrote:

>I have the CMOSII and upgraded to the III. I love the III, as it has 18  
>non-volatile memories. Once programmed it stays forever, with no power on.  
> So it can be connected to the shack 12v distribution system, and turned off  
>when you leave the shack, like all the other equipment. Then you don't need  
>to worry about batteries or redoing the thing every 4-6 months when the  
>batts go dead. Even if you power it by batts, when they die, the keyer  
>remembers  
>its lessons until you put in new batts. I would advise the upgrade if you  
>use those memories. It doesn't cost that much, either in time or money  
>to go for the better keyer.  
>72, Preston

In the CMOS III promos we keep seeing references to battery operation problems. Someone over on r.r.a.h. said the CMOS II draws .0009mA at standby in the "keyer" mode. I have had the same batteries in the CMOS II for 1 1/2 years. Mine does not have an on-off switch. What current does the CMOS III draw in the standby "keyer" mode? Will it not run on three AA cells for 1 1/2 years?

Best regards,  
wynnt

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: PDouglas12@aol.com  
Subject: [2285] Re: CMOS III was Re: MFJ 9040  
Message-ID: <960104210049\_106806725@emout04.mail.aol.com>

Wynnt,

My CMOS II ran only 4-5 months with fresh alkalines, after which it needed a reprogram. That got on my nerves, as I never knew when it would just not answer the bell. Of course battery life does depend on whether you use the keyer a lot and whether you use its built in monitor, I presume. On the current draw, I haven't measured it, as I run the CMOSIII off of 12v with a 5v regulator (cheap 78L05) which is all it needs. But I note the specs say there is no difference in quiescent current draw between the II and the III. I have not had any problems with either keyer, from day one, so can't comment on battery probs. For my money, this CMOS III is indispensable in the home shack.  
If the above looks like a paid ad, be assured it isn't. I like the product.

Preston WJ2V

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: n6xi@tss.com  
Subject: [2286] Re: CMOS III was Re: MFJ 9040  
Message-ID: <9601050211.AA17188@tekbspa.tss.com>

My CMOS II lasts over a year on four AA's. As the batteries age, the tone of the monitor decreases. That's my clue to change them.

/Rick

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: WJ4PRandy@aol.com  
Subject: [2218] re: CodeBoy review  
Message-ID: <960103231438\_105962451@mail06.mail.aol.com>

A slip of the mouse deleted a msg about someone having trouble with the case on the CodeBoy keyer not fitting together well. I have to admit the assembly was tricky ..but... I didnt have to do any special fiddling to get the board to fit and the case fit was just fine.. Maybe they got it right by the time I got mine. It is definitely not a beginners kit..things \*are\* pretty tight. I was tempted to put it in a different case, but I kept going and I'm glad I put it in the original case. It is very small and sort of just fits in line with the paddle wires on the way to the keying input of the rig. No extra power wires and "wall wart" to goof with.

73, Randy WJ4P

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: RHILTO@acxiom.com  
Subject: [2236] Re: Helical antenna.  
Message-ID: <0ebeda80@acxiom.com>

Erik Werner asked:

>Is there anyone with specs on a helical dipole antenna that I can  
>wrap around say a broom stick and place on the window sill?

Many people have done exactly this, with pretty good results. Just run down to your favorite toy store (kids' toys, not a radio store!) and pick up a pair of Slinky (tm) things; connect one to the center conductor and the other to the shield of a convenient piece of coax and have fun.

Important notes:

1) be sure to buy the legacy (what an awful word, but using it here should appease the marketing types) model of the Slinkys -- obviously the modern all-plastic version won't radiate well. And it's hard to solder it to the coax.

2) stretch it out as far as you have room for.

3) this violates all sorts of antenna design rules and probably exhibits miserable swr at several places on each band (oh, this is a multi-band antenna, too), but it does work. As Mr. Sterba would say, "All that rf coming out of the transmitter has to go somewhere" (or something like that). ; -)

I used one of these in my attic for a long time, and had reasonable results (but I was running 100w with a tube-final TS-520S and efficiency wasn't a primary concern).

7.3 ki5ez  
Bob

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: JCoote@aol.com  
Subject: [2283] Re: Helical antenna.  
Message-ID: <960104204241\_83977345@mail02.mail.aol.com>

In a message dated 96-01-04 03:29:33 EST, werner@mail2.netropolis.net (Erik Werner) writes:

>I just moved here, and I'd like to start setting up some sort of  
>ham shack in my apartment. Here's my question.  
>

>1) Is there anyone with specs on a helical dipole antenna that I can  
>wrap around say a broom stick and place on the window sill? I plan  
>to use the 40 and 80m bands, and since I don't have the room nor desire

>to have wire running all over the apartment, I plan on using at a later  
>time an antenna tuner (when \$\$\$ permits.) This is why I'm abandoning  
>the carpetloop I had up in Buffalo. Any suggestions?  
>  
>I do on looking into the gutters below my window however, but stealth  
>is of the utmost importance. :)

Erik and the Group,

Some old ARRL antenna literature suggested winding approximately  $1/2$  wavelength in wire around the form for a conventional helical antenna to be used with radials or groundplane. I've tried a few helicals on different sizes of PVC or wooden forms. I'm not that sure about the ARRL's "half wavelength" business. Instead, I always aimed for a wire length which was a good match on the frequency.

As far as "broomstick" size, keep in mind that a 4 Mhz helical might require more form length than a broomstick provides. 4 Mhz commercial mobile helicals are 6, 8, or 10 feet and 2 Mhz helicals are on an 8 or 10 foot form.

These helical whips are  $1/2$  inch or so diameter, but you can use larger forms such as PVC pipe.

Helicals (and mobile whips) are narrowbanded, especially as you go lower in frequency. A 7 Mhz short antenna may be 40-50 Khz SWR bandwidth. A 4 MHz antenna may only be 20-30 kHz wide. A 2 Mhz antenna may only be 10 kHz.

Some hams mistakenly try to cure this with a tuner. It is better to have adjustable taps and maybe a sliding rod on the helical antenna, like the "Outbacker". If you must use a tuner this way, put it at the base of the antenna.

I've found that a helical cut for one band (with a tuner at the base) can be tuned on other bands without changing taps but the antenna will not work as well.

You might look up the company "Mobile Mark" which used to be "Anixter-Mark". They make helical mobile whips and dipoles for the ham bands. They also make 160 meter helicals, or will custom a helical to ANY frequency between 1 and 30 Mhz, Amateur or no. (Sorry, I've no address or number.... no affiliation with Mobile Mark).

I'd encourage anyone to try making a helical on a varnished wood or PVC form. #16 enamelled wire should be fine for up to 100 watts. Keep the spacing between turns even. It is all right to keep the turns condensed at the top of the antenna and thinned out towards the feed end. Some prefer the same spacing between all turns though there is no data which suggests which winding is better. Some QRO hams use a capacity hat or whip to keep the top of the antenna from acting like a tesla coil at QRO, probably not needed at QRP.

Helicals, like mobile whips and many shortened antennas require a good groundplane which can be a vehicle/vessel body, or radials/counterpoise. You will find that a helical pruned or tapped for one location may require retuning if moved to a new location.

In one test, I found that a helical I made for a non-ham HF frequency exhibited some resonance on three times that frequency. Though I didn't check any further, I wonder if a 7 Mhz helical may be used on 21 MHz without SWR being too dismal?

73, Jay  
WB6AAM

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: PAT DOYLE <DOYLEPS@LAKEHURST.NAVY.MIL>  
Subject: [2258] Re: Helical antenna. -Reply  
Message-ID: <s0ebeada.019@LAKEHURST.NAVY.MIL>

I have used the "slinky dipole" with my HW-8 from inside a wood-framed hotel (I was on the second of three floors) during last year's (1995) SKN. It worked ok.

My father uses the same antenna on a regular basis running 50 watts out. He does well.

The basis of the antenna is not so different than VHF HT's "rubber attenuators."

I use, and am happy with, the Van Gordon "Shorty" dipole regularly on 80 thru 10 meters. The "shorteners" are not much more than smaller diameter, PVC encased slinkies. The total length of the antenna is 70 feet, fed with 450 ohm twin lead.

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: Paul Harden <pharden@aoc.nrao.edu>  
Subject: [2273] Re: How I added RIT to the PIXIE 2  
Message-ID: <199601042308.QAA29611@zia.aoc.nrao.edu>

Jeff KD6MNP,

Sounds like you did some nice engineering on the Pixie RIT circuit.  
A job well done. Thanks for sharing it.

Paul NA5N

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: N5EM@aol.com  
Subject: [2264] Re: HW-7s, 8s, 9s ...  
Message-ID: <960104161238\_106554331@mail02.mail.aol.com>

In a message dated 96-01-04 14:10:13 EST, you write:

>I have never owned a Heathkit QRP rig. And I see this traffic all the  
>time on the HW-7s, the 8's and 9's. Would some kind soul be so kind  
>to explain to those of us as ignornat as I as to the basic differences  
>between the various HW-series QRP rigs? You never know when one might  
>surface locally too cheap to turn down! Just curious. Well actually  
>more than curious, I want to know =:-o

>

>Paul NA5N

>

>

>

Sounds like a job for Queue Our Pea :-)

Ed

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: "Robert J. Gobrick" <rgobrick@nfld.com>  
Subject: [2290] Re: Icom 706  
Message-ID: <199601050241.XAA15071@public.compuser.net>

Hi Bob,

I just recently picked up an IC-706 and it is a fantastic little rig (even  
for QRP :^)

If you can hang on a few more months I was able to get a review of the rig  
written by a QRPer - Marrie PA3FZS that was to appear in the January 1996  
issue of the QRP ARCI "The Quarterly". It didn't make it but hopefully it  
will appear in the next issue. Marrie did a nice job reviewing the rig from  
a QRPer's perspective.

Let me know if you want a private preview or the article.

Have fun with the new toy and have a Happy New Year.

73/72 Bob V01DRB/WA6ERB

At 00:52 1/1/96 EST, you wrote:

>New Year's Eve:

>

>Was wondering if anyone else on the circuit is starting the New Year with an  
>Icom 706? I have been using the little beastie at 5 watts out today and  
>aside from fan noise, and clicking relay noise with full breakin, am  
>enjoying its 1 hertz readout, band scan scope, 6 & 2 mtr all mode coverage  
>and ease of use.

>

>72/73 Bob WB7CNJ - Norcal #201, QRP-L #333.

>

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| Bob Gobrick - V01DRB/WA6ERB/VE2DRB - Newfoundland, Canada |
| QRP'er Galore - ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |
| Internet:      rgobrick@public.compuserve.nf.ca |
|                bgobrick@terra.nlnet.nf.ca |
| Compuserve:   70466.1405@compuserve.com |
|-----
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From qrp-l@lehigh.edu Thu Jan 4 21:15:51 1996  
From: PA3ASC@bonny.hol.nl (Mike Perry)  
Subject: [2268] Re:Is Siesta Key an IOTA?  
Message-ID: <199601042209.XAA03283@bonny.hol.nl>

Gang.

>I mentioned to Chuck that I am taking a weekend with my wife on Siesta Key  
>(near Sarasota) in a couple weeks (Jan 12-14). He said this may be an island  
>in the IOTA numbering system, and it may be sought after. Anybody know? If  
>I get permission from my wife, I could fit the Sierra into a carry-on.  
> Anybody know how to find IOTA numbers?  
>72,  
>Preston WJ2V

1. The IOTA is run by RSGB and information can be obtained  
from the IOTA Director Roger Balister, G3KMA,  
"La Quinta", Mimbridge, Chobham,  
Woking, Surrey GU2 8AR, Eng;and

or possibly in the USA from

Tom Webster, WT20  
72 Thornley Rd., Eatontown, NJ, 07724.

2. My IOTA Directory indicates an island group NA-034 off the west coast of Florida near Sarasota. Islands in this group include: Anna Marie, Boca Ciega, and Clear water; but Siesta Key is not specifically mentioned. It may be hidden under the term "etc."
3. IOTA have specific rules as to what qualifies as an Island for the purposes of the award, but these are too many to go into here. Not all natural islands qualify. This is all detailed in the IOTA Directory obtainable from G3KMA.
4. Note the special requirement that, to be valid for this award, a QSL must have the name of the island PRINTED on it; (A handwritten endorsement will not be accepted for IOTA credit).

Hope this helps a little.  
Happy new year to everyone.  
es 73

--

Regards,  
Mike Perry. [e-mail :- PA3ASC@mailbox.hol.nl ]  
=====

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: Paul Christensen <PaulC@jax.se.continental.com>  
Subject: [2234] RE: KC-1 for Argonaut?  
Message-ID: <30EC10BC@se.continental.com>

>While I am Argo-crazy, has anyone adapted the KC-1 freq counter /  
>keyer to the old Argonauts? It seems a good idea.

I think it's a great idea! I've got an Argo 515 that I would like to try the idea on. I installed the KC-1 in my Wilderness NorCal 40A and it works so well, that I think the Argo idea would work well. Does anyone know if the Argo's VFO frequency is within the KC-1 specification?

-Paul, N9AZ



From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: Joe Spencer <jspencer@metronet.com>  
Subject: [2262] Re: Latest QRPP and SPRAT  
Message-ID: <Pine.HPP.3.90.960104145106.24772B-100000@fohnix.metronet.com>

Yes and Yes!

I received QRPP over a week ago and SPRAT yesterday here in North Texas.

72, Joe KK5NA

On Thu, 4 Jan 1996, Larry East wrote:

> Are the December issues of QRPP and SPRAT "on the street" yet? Haven't  
> received either here in the "Idaho Outback" (yes, my dues are up-to-date...).

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: oguma@super.win.or.jp (Akihiro Oguma)  
Subject: Looking for crystal controlled transmitter

I would really like to find transmitter.  
If possible, it is crystal controlled one and battery is supplied with AC.

Because...

There are a few types, so we can easily find it bug.

Could you tell me the fax number or E-mail address of the shop ?  
Thanks much!

Akihiro Oguma

oguma@super.win.or.jp

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Wayne Barnhart WB7WHI  
Spokane, Wa.

Dirt is good!

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: PDouglas12@aol.com  
Subject: [2244] Re: MFJ 9040  
Message-ID: <960104113536\_31610666@mail04.mail.aol.com>

Brad,

I have the CMOSII and upgraded to the III. I love the III, as it has 18 non-volatile memories. Once programmed it stays forever, with no power on. So it can be connected to the shack 12v distribution system, and turned off when you leave the shack, like all the other equipment. Then you don't need to worry about batteries or redoing the thing every 4-6 months when the batts go dead. Even if you power it by batts, when they die, the keyer remembers its lessons until you put in new batts. I would advise the upgrade if you use those memories. It doesn't cost that much, either in time or money to go for the better keyer.  
72, Preston

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: "Robert J. Gobrick" <rgobrick@nfld.com>  
Subject: [2289] Re: more on folded dipoles (long: delete now if not interested)  
Message-ID: <199601050241.XAA15050@public.compuser.com>

LB and QRP-L Gang,

Boy what a nice "read" on folded dipoles after coming back from my Christmas holidays and facing 700+ QRP-L emails (yes I read all my email and I LOVE it..).

Anyway your thoughts on the folded dipoles brought back some great memories which now has encouraged me to go into the garage and find that roll of fancy 300 ohm twinline that I bought many years ago and do some "somthin with it"

Your folded dipole chats made me reminisce of my "early" life as a Novice ham. I had one book that I took everywhere with me (and I mean everywhere) - it was Bill Orr's book simply called "Low-Cost Wire Antennas". I had this book memorized from front to back and I still kept on reading it - I even did my math exercises using it (now you are getting a little sense of my age) by recalculating the wavelengths (in kilocycles) for different frequencies and different bands etc. This little blue book (not sure if it is still blue) was such a great little book on everything you wanted to know about wire antennas that were easy to build - dipoles, folded dipoles, parasitic wire beams, wire verticals on and on and on. As John C. Dvorak of computer fame would say "Highly Recommended".

Thanks LB and Happy New Year to all.

73/72 Bob V01DRB/WA6ERB

PS: Enjoyed your antenna tuner tutorial in the new QRPP - looking forward to hearing you at the Dayton "Four Days in May (c)" QRP Symposium - (opps that's proprietary info...)

At 20:51 12/22/95 EST, you wrote:

>A couple of questions have been sent me about folded dipoles. For  
>those interested, here are some notes (that do not pretend to be  
>complete answers). The notes are a bit long, so if not interested,  
>please delete before reading further.

>

>1. Would a folded dipole be a good all-band antenna via an ATU?

>

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| Bob Gobrick - V01DRB/WA6ERB/VE2DRB - Newfoundland, Canada |
| QRPPer Galore - ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |
| Internet:      rgobrick@public.compuserve.nf.ca |
|                bgobrick@terra.nlnet.nf.ca |
| Compuserve:   70466.1405@compuserve.com |
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From qrp-l@lehigh.edu Thu Jan 4 21:15:51 1996  
From: adams@chuck.dallas.sgi.com (chuck adams)  
Subject: [2241] Re: newcomer  
Message-ID: <199601041552.PAA09956@chuck.dallas.sgi.com>

John et.al.,

Welcome to the group. Hopefully it will be as much fun for you as it is for us.

I do 0.95W all the time. Using either OHR or NN1G rigs. My personal recommendation is to start at the magic level of 0.95W and see how the propagation and how the antenna system is going to do at your QTH. Milliwatting isn't for everyone. You gotta be able to take rejection pretty well. :-)

Don't know if you caught the AA4XX beacon but at 200mW conditions have just gotta be super in order for people to even know you are there and if it hadn't been preannounced I might have passed over the frequency. Additional note to the group. Please do not post the secret word.

Paul needs to keep it a secret for as long as he can.

I have a pair of Sony earphones that came with a Walkman WM-10 cassette player that runs on 1 AA battery and just slightly larger than the cassette. Of course Sony no longer makes either the player or the earphones. I love the earphones as they have a small metal band over the head and are light and comfortable, airy which I insist on in order to prevent ear disorders due to fungus/humidity/moss/mold build-up. :-) Comfort and efficiency is everything for doing any kind of lengthy sessions or just listening. My only complaint with the mfg's is the length of the cord is too short. Many a time I've almost drop tested a rig on the floor when moving from one part of the desk to another.

Again, welcome.

dit dit

qrp

--

Chuck Adams (K5FO CP-60) adams@sgi.com  
Box 181150, Dallas, TX 75218-8150

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: "Robert J. Gobrick" <rgobrick@nfld.com>  
Subject: [2291] Re: OHR 400 "Narrow" Filtering.  
Message-ID: <199601050241.XAA15057@public.compuser.net>

Hi Jess,

You brought up some interesting points on your new Oak Hills Research Quad bander that I am also a little curious about. I am even a little more curious now since I have sitting on my work bench two of my winter projects (yes there is more) - a new OHR Quadbander like yours and a new Explorer II. I am looking forward to building both of these rigs.

I'll just say right now that I suspect that when I get it finished the OHR Quad Bander will be my "favourite" rig. I have built the OHR Classic which is the dual band version of the Quad bander and the offspring (?) of the Spirit single bander. These rigs are based on a common superhet design heritage of a buffered RF amplifier feeding a MiniCircuits static ring mixer, 4 pole crystal filter, IF amp, 4 poles of audio filtering and finally the audio stage. My Classic was a HOT rig and my favourite QRP contest rig.

In an article that I wrote for "The Quarterly" (April 95) on the Classic Dual Bander I mentioned that I missed that lack of the Spirit RF gain control and AGC on/off switch (which are all now back in the Quadbander).

My reasoning was that I needed an RF gain control since I felt that the AGC circuit was a little weak in my rig (worstest case was listening to a weak qrp contest stations when a Pennsylvania State Kilowatt contestester comes on freq - ouchhhh). I did some troubleshooting to see if I could develop some more AGC feedback voltage to limit the IF gain but to no avail. After talking to a few other Classic and Spirit owners it appeared they had similar AGC problems. Again the AGC worked - it just didn't work well enough for my use (sure I could build an AGC circuit recently described by Mark KN5S in the Oct 95 QEX (check it out) - but hey that fine AGC circuit has MORE components than the Classic has..)

The reason why I bring this up is I noticed in Dick's new Explorer II design he has come up with a new AGC circuit. I talked to him on the phone and he claims that it's a good circuit that uses less parts than the original Explorer I unit. I'm anxious to see how this circuit works in the new Explorer II and see if it something which I may want to jury rig into the Quadbander.

I am also interested to see how the "downsized" type Ten Tec Jones filter works in the new Explorer II. It sounds like a neat 'feature" but I am skeptical on how it affects the crystal filter skirts and pass-through attenuation. A quick look at Dick's schematic says the OHR variable width bandpass filter is similar to what Wilderness is offering for the new Sierra - basically a trimmed down Ten Tec version (with the compromises that go with it). I still am a die-hard and I prefer a well shaped IF crystal (or mechanical) filter with some "clean-up" audio filtering behind it (what the Quadbander does). But let us not forget we are talking about a variable bandwidth IF in a \$100 class rig - that is really something...

Anyway Jess keep us informed on what you hear from other Quadbander owners. I have to admit that I felt the OHR Classic was MY Classic rig but I can tell now that the new Quadbander will now take that spot (maybe Dick should have named his rigs the Classic, the Classic Dualbander and the Classic Quadbander..)

73/72 Bob V01DRB/WA6ERB

At 18:19 12/27/95 EST, you wrote:

>I noticed that there was a mod on the list to increase the width of the  
>filter if on the 400. 0 too have noticed that the radio is a little tight. I  
>have also noticed not much action from the AGC at all, not much difference  
>with it switched in or out. My questions are this to the list.

>

>1. Have other 400 users noticed this lack of or low level action from the AGC  
>circuit?

>

>2. Instead of switching out the IF filter, how hard would it be to

>incorporate a variable width band pass filter ala the Explorer II? A small  
>add in board would be no problem as the 400 has PLENTY of internal real  
>estate.  
>  
>Any ideas?  
>Best in 96  
>Jess N0TFI  
>  
>

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| Bob Gobrick - V01DRB/WA6ERB/VE2DRB - Newfoundland, Canada |  
| QRPPer Galore - ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |  
| Internet:      rgobrick@public.compusult.nf.ca |  
|                bgobrick@terra.nl.net.nf.ca |  
| Compuserve:   70466.1405@compuserve.com |  
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From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: NONE <wynnt@utkux.utcc.utk.edu>  
Subject: [2240] Re: Polarity Protection  
Message-ID: <Pine.SOL.3.91.960104102311.19190A-100000@utkux4>

In these days where fragile PN junctions exist everywhere including power supplies, it is best to add the diode protection. Theoretically instantaneously stopping the current flow in even a modest inductor\ (Coil) can generate a very large voltage spike.

The "free wheeling diode" found across DC coils allows the current or the collapsing field energy to dissipate through the winding resistance when the coil supply current is interrupted. This prevents potentially damaging voltage from appearing at the terminals of the switch or transistor. The "turn-off" or release time is increased by the diode but that's a small price to pay usually.

Best regards,  
wynnt

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: cebik@UTKVX.UTCC.UTK.EDU  
Subject: [2227] Re: Tuner discussion  
Message-ID: <Pine.PMDF.3.91.960104065515.541087019B-100000@utkvx.utk.edu>

On Wed, 3 Jan 1996, Roy Boggs wrote:

> Here is my own experience with tuners: Using a Heathkit SA-2060A and QRP  
> rigs I have found the Autek RF-1 to be the most valuable piece of equipment  
> for tuning. At a specific frequency, I first adjust for Z (50 ohms) then for  
> SWR (which may or may not be 1:1 on my 160 meter inv-vee). Going back and  
> forth between SWR and Z, I adjust for the perfect match. Without the RF-1 I  
> would never know about reactance, only SWR. What's the difference?... well  
> you can have a Z=50 ohms and not have 1:1 swr, right? Losses?, well a 35mW  
> signal from the lil W1FB Mighty Mite (QRP Notebook) manages to wiggle  
> through the tuner and 250 feet of 450 ohm ladder line to my antenna and net  
> 579 RST to New Hampshire. The roller inductor really puts it right on the  
> nose. Can't put a Heath 2060A into a briefcase though.  
>  
> Wearing asbestos,  
Roy,

Roy,  
Take off the asbestos. You are right on target for the most precise  
tuning. Since VSWR involves a complex relationship between the R and X  
components of the impedance, you cannot simply use  $z/50$  or  $50/z$  to  
calculate SWR unless the impedance is R only with no X. Working the  
other way, you cannot assume that any value greater than 1:1 represents a  
pure resistive impedance. At 1:1, assuming no outside loss factors, the  
impedance will be purely resistive.

As I noted in another context, roller inductors are in principle the  
counterpart of variable capacitors: continuously variable units allowing  
the most precise setting, according to whatever criteria are apt for the  
tuning situation.

However, no one should throw out their switched-inductor tuners. As you  
note, roller inductors are BIG and they do have other limitations. Also,  
the increased levels of loss due to being unable to hit the absolutely  
most efficient tuner network setting are not so great, as long as one  
uses care to get the best setting within the switching limits (in  
contrast to any old setting that will get some kind of match). If  
perfection is 2-5% network loss, then switched might be 4-8%--still under  
a dB--if there are many switching positions, in contrast to one per  
band. Given the wide spectrum of values that might present themselves to  
the ATU antenna-side terminals, there is no such thing as a single  
40-meter inductor setting for the LCL and CLC PIs and Ts.

Good luck in all your operating.

-73-  
LB, W4RNL

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: jgoemans@facstaff.wisc.edu (Jane Goemans)  
Subject: [2256] Re: Tuner discussion  
Message-ID: <199601041918.NAA28969@audumla.students.wisc.edu>

On Wed, 3 Jan 1996, Roy Boggs wrote:

> Here is my own experience with tuners: Using a Heathkit SA-2060A and QRP  
> rigs I have found the Auttek RF-1 to be the most valuable piece of equipment  
> for tuning. At a specific frequency, I first adjust for Z (50 ohms) then for  
> SWR (which may or may not be 1:1 on my 160 meter inv-vee). Going back and  
> forth between SWR and Z, I adjust for the perfect match. Without the RF-1 I  
> would never know about reactance, only SWR. What's the difference?... well  
> you can have a Z=50 ohms and not have 1:1 swr, right? Losses?, well a 35mW  
> signal from the lil W1FB Mighty Mite (QRP Notebook) manages to wiggle  
> through the tuner and 250 feet of 450 ohm ladder line to my antenna and net  
> 579 RST to New Hampshire. The roller inductor really puts it right on the  
> nose. Can't put a Heath 2060A into a briefcase though.

>

> Wearing asbestos,  
Roy,

Roy,

Take off the asbestos. You are right on target for the most precise tuning. Since VSWR involves a complex relationship between the R and X components of the impedance, you cannot simply use  $z/50$  or  $50/z$  to calculate SWR unless the impedance is R only with no X. Working the other way, you cannot assume that any value greater than 1:1 represents a pure resistive impedance. At 1:1, assuming no outside loss factors, the impedance will be purely resistive.

As I noted in another context, roller inductors are in principle the counterpart of variable capacitors: continuously variable units allowing the most precise setting, according to whatever criteria are apt for the tuning situation.

However, no one should throw out their switched-inductor tuners. As you note, roller inductors are BIG and they do have other limitations. Also, the increased levels of loss due to being unable to hit the absolutely most efficient tuner network setting are not so great, as long as one uses care to get the best setting within the switching limits (in contrast to any old setting that will get some kind of match). If perfection is 2-5% network loss, then switched might be 4-8%--still under a dB--if there are many switching positions, in contrast to one per band. Given the wide spectrum of values that might present themselves to the ATU antenna-side terminals, there is no such thing as a single 40-meter inductor setting for the LCL and CLC PIs and Ts.



Good luck in all your operating.

-73-

LB, W4RNL

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: Michael Connor <mikec@primenet.com>  
Subject: [2254] Re: what I would like to see in kit  
Message-ID: <199601041901.MAA24085@usr1.primenet.com>

Or a Norcal 40A/KC1 mounted in a Sierra-sized case, with the  
extra space housing an ATU circuit...

72,  
Mike  
NQ7K

At 01:15 PM 1/4/96 EST, you wrote:

>I would like a kit.. and take this with all the items Brad listed:  
>  
>puts out 10 watts SSB and has built in speech processing..  
>basically a MFJ that doesn't drift, with a Norcal 40 CW ability and a  
>KC-1 built in .. now think that should be doable for around \$250  
>  
>73  
>  
>Jeff, AC4HF  
>  
>

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: N5EM@aol.com  
Subject: [2265] Re: what I would like to see in kit  
Message-ID: <960104161232\_106554236@mail02.mail.aol.com>

In a message dated 96-01-04 14:03:01 EST, you write:

>  
>Or a Norcal 40A/KC1 mounted in a Sierra-sized case, with the  
>extra space housing an ATU circuit...

>72,  
>Mike  
>NQ7K  
>  
>

An AUTOMATIC ATU!  
Ed

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: Monte Stark <ku7y@sage.dri.edu>  
Subject: [2287] Re: what I would like to see in kit  
Message-ID: <Pine.SUN.3.90.960104181714.2590A-100000@vortex.sage.dri.edu>

Built in CPU to keep the contest log.....

73, Ron,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....  
...ku7y@sage.dri.edu.....Sun Valley, Nevada....  
...QRP-L #17....ARRL....NorCal #330.....NRA LIFE.....

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: Paul Christensen <PaulC@jax.se.continental.com>  
Subject: [2249] RE: Where to get air variable caps?  
Message-ID: <30EC34C8@se.continental.com>

>Thinking of building the Z-match tuner from the July QQ and  
>would like to find a couple of dual section 300 - 450 pF air  
>variable caps.

I would like a copy of the article. Does anyone know how I can subscribe to  
QQ?

-Paul

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: Rick Zabrodski <zabrodski@med.ucalgary.ca>  
Subject: [2261] Re: Where to get air variable caps?  
Message-ID: <Pine.SUN.3.91.960104133426.3407A-100000@ume>

Antique Radio Supply in Arizona has a variety of air variables suitable for tuner. I just ordered some for my "2nd" Z match tuner. They have a catalog.

Dr. Rick Zabrodski BSc, MD, CCFP(E)	*	VE6GK
Clinical Assistant Professor	*	NorCal 519 ARCI 7650 GQRP 8329
Faculty of Medicine, Univ. of Calgary	*	"Power is no substitute for skill"

From qrp-1@lehigh.edu Thu Jan 4 21:15:51 1996  
From: Alan Kaul <kaul@netcom.com>  
Subject: [2257] Re: Wilderness NorCal-40A  
Message-ID: <Pine.3.89.9601041124.A29167-0100000@netcom22>

Congratulations to Wayne on a terrific design! And thanks to Rich for posting the results of the lab tests. I own the 40 and I thought it was a great radio before the A-model was introduced!

[<Alan Kaul, W6RCL>] kaul@netcom.com